

Improvement guide and resource







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Overview

What does this guide do?

This guide has been created from a combination of expert opinion, review of the literature and the author's and contributors' own experiences. It explores the quality improvement (QI) journey, using the Model for Improvement¹ – a QI approach commonly used in healthcare. There are many other QI approaches available, however, and this guide can be used alongside whichever you and your organisation prefer. This guide has been structured in a logical order to support the delivery of your project and we have hand-picked the QI tools we think will be most helpful.

It is important to fully understand the system you are working within, diagnose any problems and identify the impact of potential improvements before trying to make any changes. This guide takes you through this journey from beginning to end. By the end of this guide, you and your project team should be able to describe your system, have defined some key local issues and have a plan to implement improvements and monitor their effects.

It is key that representatives from related health and social care sectors are included in your project, to ensure the whole process is understood and that these stakeholders can support and 'own' the development of successful interventions.



How to use this guide

Start by reading through the headings included in sections 1–5 to orientate yourself with the guide. Then return to the beginning to start working through the guide, page by page.



Fig 1: How to use this guide

Section 1: Introduction

Create a project team, assign a project lead and arrange project meetings

Decide your QI approach



Section 2: Identifying the problems

Gain an understanding of your local system, potential issues you can focus on and who you should involve in the project



Section 3: Measuring improvement

Understand why measuring for improvement is important and find out what potential measures you can use



Section 4: Defining the project

Define the scope of your project and the issue you're focusing on and decide what improvement interventions to make



Section 5: Implementing your improvements

Understand PDSA cycles and how to sustain and spread your project in the long term



Tip: How to use this guide (Fig 1) is represented linearly, but you may find that you visit sections in a different order and return to them at different points. This is normal and encouraged, as it'll help you to continuously adapt your project as it progresses.

Section 1: Introduction

Who is this guide for?

This guide is for anyone looking to start developing and leading a QI project.

It is aimed at the project team leader and their team and intended to be used as a table-top exercise with the whole project team. The team members will likely have varying levels of QI experience and anyone new to QI or needing a refresher may find the resources in Useful resources
1 helpful, before using the rest of the guide.

Exercise 1

Create a project team and assign a project lead

If you haven't already, gather a few people who will become your core project team. Prior improvement experience is not compulsory, but they must have the drive to make changes to the system and have time to do the work for this project. Throughout the project you can discuss who else you'd like to involve (see
The team">The team).

Agree who will be your project lead, although you will ultimately work as a team to ensure success of the project. For professionals in training, educational supervisors should support project leaders throughout the project (see also the RCP's *Supervising quality improvement projects: A guide for supervisors*²).

Why should you use it?

This guide will help you to identify and implement QI projects. You and your team may already have your own ideas, but it is important that you go through the process of diagnosing the problems, defining your measurements and interventions, and ensuring the sustainability and spread of your project to achieve a successful outcome.

Using a QI methodology

QI is a systematic process to improve quality, involving identifying areas for improvement, understanding the problem, testing solutions and measuring and evaluating any changes.³ It is commonly used in healthcare when looking to make improvements. According to the levels of QI experience in your team, you may find it helpful to schedule in a QI education session towards the beginning of your project or signpost the team to information sources (see <u>Useful resources 1</u>).

Useful resources 1

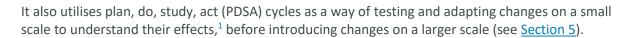
- > ABC of quality improvement in healthcare³
- > RCPQI: RCP quality improvement resources Royal College of Physicians⁴
- > Improving improvement (toolkit) University of Cambridge⁵
- > Quality improvement made simple The Health Foundation⁶
- > How to get started in quality improvement (article)⁷
- > Institute for Healthcare Improvement (IHI)⁸
- > If you are a clinician in training, you can register for IHI Open School⁹
- > The improvement hub NHS England¹⁰

There are many QI approaches available and we have highlighted some commonly used ones below.

Model for Improvement

The Model for Improvement is based on three questions:¹

- > What are we trying to accomplish?
- > How will we know that a change is an improvement?
- > What change can we make that will result in improvement?



Lean

This approach focuses on continuous and systematic elimination of anything that does not add value to the patient or process, where value is observed from the patient's perspective.³ It can lead to improvements in patient satisfaction and experience, as well as eliminating unnecessary work and improving the flow of healthcare processes, ultimately resulting in improvements in safety.³

Experience based co-design (EBCD)

This approach uses patient and staff stories about their experiences to co-design solutions to identified issues. 11 You can use this approach alongside other QI methods to gain qualitative data, which provide rich insights into patients' experiences of the process. 11 For further details see EBCD: Experience-based co-design toolkit¹² by The Point of Care Foundation (free registration required to access).

Exercise 2

Decide which QI approach you will use

Your organisation may use a range of QI approaches so find the one that's suitable for your project by asking your QI team or educational supervisors. Make sure everyone in the team is familiar with it and find out if local training is available.

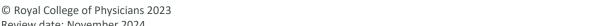
How long will the project take?

QI is about continuous improvement and there are no set timescales. We have put together a suggested meeting plan below (see Table 2), but every team's schedules will be different as it depends on many factors, such as team member availability, resources and project complexity.

Table 1: Suggested meeting plan

Meeting 1	Team introductions, identify QI methodology and stakeholders	Pages 5–10
Meeting 2	Understand the system	Pages 11–12
Meeting 3	Define the measurements	Pages 13–14
Meeting 4	Outline the scope of your project	Pages 15–16
Meeting 5	Define improvement initiatives	Pages 16–20
Meeting 6	Agree implementation, spread and sustainability	Pages 21–2

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Exercise 3

Arrange project meetings

Start by arranging six initial meetings (see Table 1) at least a few weeks apart. You may need longer between some meetings to collect information and the meeting length will depend on whether you choose to complete activities within or between meetings.



You will likely need more meetings than this, but getting these initial ones in the diary now should give you and the team the momentum to continue with regular meetings.

Decide which QI approach you will use

Your organisation may use a range of QI approaches so find the one that's suitable for your project by asking your QI team or educational supervisors. Make sure everyone in the team is familiar with it and find out if local training is available.

End of section checklist

By now, you should know:

- > how this guide can help you on your journey to improve quality
- > which QI methodology you will use the dates of your first team meetings.

Section 2: Identifying the problems



The team

A collaborative approach between everyone involved in the problem you are trying to solve or system you are aiming to improve is key. It provides an excellent opportunity for teamworking, not just within the hospital but also between healthcare sectors, and for including patients, carers and families at every step. Having a knowledge and appreciation of others' roles is an important step in improving the systems in place.

Stakeholders

A stakeholder is anyone who will be impacted by, important to or interested in your work. These people will have different roles within your project, depending on their influence and interest, and you will engage with them in different ways. In this section, we will ask you to identify a list of stakeholders, analyse their role in your project and create an engagement plan. Stakeholders to consider involving in your project are shown in Fig 2, but you will be able to come up with more.

Fig 2: Potential stakeholders

- > Service users, patients, carers and families
- > Patient experience teams
- > Pharmacy staff
- > Medical staff
- > Nursing staff
- > Medication safety or patient safety committee
- > Social care representatives
- > Allied health professionals
- > Residential home staff
- > Hospital porter
- > Hospital ward clerk
- > Community pharmacy staff
- > General practice staff
- Integrated care teams (or equivalent)
- > Quality improvement teams (or equivalent)
- > People who can help with data and measurements, eg informatics teams, QI experts, data analysts
- > Managers and executive staff



Stakeholder analysis

This tool helps identify those who need to be involved as well as those who will be affected by your project, allowing you to assess how much time and resource to give to each of them.¹³ The stakeholder analysis (see example in <u>Fig 3</u>) is populated with your stakeholders, allocating them to the sections that most represents their level of influence and interest in the project.

Useful resources 2

- > Stakeholder analysis template
- Stakeholder analysis NHS Education for Scotland¹⁴

Fig 3: Example stakeholder analysis¹⁴

Influence of stakeholders ——	Engage and address needs and concerns [2] eg hospital executives, commissioners, clinical directors, heads of nursing, chief pharmacist	Key players to involve in the project [1] This is your core project team and others playing a big role in your project, eg staff and some patients in the area you're making improvements
	Keep informed [4] eg members of the public, other hospital staff	Keep engaged and involve where needed [3] eg patients, carers and colleagues from other areas not in your project team, such as staff from different wards, GP, community pharmacy, district nursing and social care
	Interest of stakeholders	—————————————————————————————————————

Exercise 4

Complete a stakeholder analysis

List your stakeholders, using pen and paper or a computer. Think about who is involved, including those inside and outside the organisation (see Fig 2 for ideas).

Next, place these stakeholders in the most appropriate category in the stakeholder analysis (see Fig 3) and add them to your own, using the template. Complete this with your project team and revisit it as your project develops (we will remind you to do this later in the guide) as your stakeholders and their roles may change.



Fig 4: Project stakeholders

This diagram shows how the different groups from the stakeholder analysis relate to each other

The core project team

Your core project team are those who are invested in this project and will work as a team to ensure the project is a success (see Exercise 1). You want to involve people with a range of perspectives and experiences and, as a minimum, to include those who are integral to or have technical expertise in the process.





Tip: At this point, ask yourselves – have we included everyone that we need? Revisit this question at various points throughout your improvement journey (see <u>Exercise 4</u>), remembering that it's OK to include people in the project after you've started.

Stakeholder needs statements

Completing stakeholder needs statements will help you to understand the system from the perspective of those involved. Speak to your stakeholders and ask each of them to complete this statement, thinking about what they need from the system (you and the team can do this theoretically if you're short on time).

'As a ... I need ... so that ...'5

To ensure understanding of the whole transition, make sure you ask stakeholders from outside the hospital and include the needs of patients and carers once they leave hospital. Discuss the answers within your team.

Useful resources 3

Improving improvement (toolkit)⁵
(See resources > service users / service stakeholders / service improvers for more information on creating stakeholder needs statements for your different stakeholders)

Engaging with stakeholders

To engage your stakeholders, you will need to communicate effectively with them throughout your project.³ Different stakeholders will need different types of communication, so spend time thinking about how you're going to do this, who will do it and how this will fit in with your project. To help ensure a successful and sustainable project, plan how to embed your work within your organisation's priorities.

Exercise 5

Create a stakeholder engagement plan

Think about the four different groups from your stakeholder analysis in Exercise 4, and decide how you'll communicate with them (eg face-to-face meetings, email, newsletters), who will communicate with them and how often. Write this down in a plan that everyone in the team can access.

Mid-section checklist

By now, you should know:

- who your stakeholders are and what their roles are within the project
- how you'll engage with your different stakeholders throughout the project



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Understanding the system

Defining and understanding how your system currently works is an important initial step in your QI journey. One way to do this is using a technique called process mapping (also known as a flow chart).

Process mapping

This involves drawing out (or mapping) the processes and steps that make up the system, process or pathway you and your team are trying to improve, enabling the creation of a visual picture of how it currently works. 17

The best way to do this is by observing the system in practice but if you don't have time to do this, use the knowledge and experience of those who know how it works to complete the map. Make sure you think about the system as it currently is, not how you'd like it to be, at this stage.



Tip: Speak to colleagues in the area(s) you're looking to make improvements in – they will be aware of how the system works, will have come across problems previously and be able to offer valuable advice, or even get involved in your project.

Process maps need a defined start and end point. Even if you are looking to make improvements in a defined part of a process, it can be helpful to look at stages before and after, as this allows a greater appreciation of all elements involved. The end steps of the process map can change depending on what you want to focus on, which may be a particular destination or outcome.

Useful resources 4

- > Improvement tools: flow chart University of Cambridge¹⁸
- > Flowcharts (part 1) Institute for Healthcare Improvement¹⁹ (free registration required to access some content)



Tip: You can create this on paper or electronically. If you're having virtual meetings, some platforms allow multiple people to use an interactive whiteboard at the same time, which could be useful when producing your process map.

Exercise 5

Create a process map

Get input from a wide range of individuals and resources to fully understand your system. You don't need to go into too much detail at this stage, but having an appreciation of the whole process will be useful when it comes to identifying areas to focus on.

Tip: When creating your process map, think about the following:

> Are there any other parts of the process, that may not be directly related, that are also relevant here?



- > Are there any other relevant decisions being made? Where do these happen?
- > Where is the patient at each step in the journey?
- > Where are the gaps in your knowledge and who do you need to ask to complete this part of the process?

What else can help you to understand the system?

Many of the tools and resources you already have can help you to understand your system, and information from these sources can be added to your process map. These might include:

- > audits and QI projects find out if any recent audits have been undertaken and review the findings
- > narrative from patient and staff stories, complaints, compliments and incident reports
- > previous incident investigations
- > routinely collected data: ask your informatics and patient experience teams (or equivalent).



Tip: By completing a process map, you'll also identify some points of interest or risk. To understand these points in greater detail, you may want to gather your own data by undertaking audits or using other measures – ask your local audit and QI teams for help.

End of section checklist

By now you should have:

- > created a process map and have an understanding of your overall system
- > explored the use of data to inform your process map
- > started to identify some areas for improvement (and possibly have agreed an area of focus).

Section 3: Measuring improvement

The second question in the Model for Improvement asks: 'How will we know that a change is an improvement?'.³ Measurement is an important part of any QI project and will enable you to see whether any changes you make are resulting in improvements over time.

Once you know the general problem you're trying to solve, start to think about what you can measure to show whether there is any improvement. There will be people in your organisation who can help with this – find out whether you have local audit teams, QI teams, data analysts or others who can support you at this stage.

There are three types of measures that you will need for your QI project:

- > Outcome measures: reflect the impact on the patient and show the result of your improvement work²⁰
- > **Process measures**: reflect the way your systems and processes work to deliver the intended outcome²⁰
- > **Balancing measures:** reflect what may be happening elsewhere in the system because of the change²⁰

You should use a few different measures, from a range of quantitative and qualitative data sources, for your outcome, process and balancing measures.³ Your measures should reflect what you are trying to achieve³ (ie your aim statement – see <u>Section 4</u>) but will also depend on the resources available to you to access and analyse the data.

You will also need to think about measuring things other than safety, such as use of resources, eg costs and staff time, and overall patient and staff experience.

To minimise workload, embed measurement into routine processes where possible, such as through regular audits and utilising existing data sets¹ – speak to colleagues in your informatics and patient experience departments (or equivalent) to find out what data are already available.



Tip: During the project, keep a note of any events such as major incidents, ward closures, staffing changes and other improvement projects occurring at the same time, including the dates they happen, as these may influence your measures.

Useful resources 5

> ABC of quality improvement in healthcare³ – see Chapter 9: Measurement

Making data count - NHS Improvement²¹

Exercise 6

Scope out potential measures

At this point, you may not know all the measures you'll need but you can start scoping out potential measures if you know the general area you'll be making improvements in. Thinking about measures now can also help to inform your process map (see Exercise 7) and identify potential interventions.

Discuss potential measures at your next team meeting and record a measurement plan (you can do this on a computer or on paper), including:²²

- > name of measure
- > type of measure (process, outcome, balancing)
- > definition
- > why you're measuring it
- > how often data will be collected
- > the calculation you're using (numerator, denominator)
- > how data will be collected (including source) who will be collecting the data.

Recording your measures

When you know what you're going to measure, you'll need to collect and present the data.

- > Start collecting data before you implement your interventions (these are known as baseline data). It doesn't matter if these are collected retrospectively, but you need them to be able to see whether improvements are being made once you've implemented your interventions.
- > Use continuous data (rather than just recording data before and after) as this will make it easier for changes to be detected.³ Presenting data like this will also help to keep your stakeholders engaged, as they can clearly see any changes over time.
- > Two common ways of presenting continuous data are a run chart or a statistical process control (SPC) chart.³ Refer to <u>Useful resources 5</u> for more information.
- > Automate data collection where possible. This makes it easier to continually monitor improvement and therefore develop your improvement project and inform the direction of future improvement initiatives.

End of section checklist

By now you should have:

- > knowledge of the differences between outcome, process and balancing measures, alongside quantitative and qualitative data and why you should include them all
- > a general idea of the measures you will use in your project.



Section 4: Defining the project

Defining the scope of your project

You need to be specific when defining the remit of your QI project to ensure that it's manageable. Many QI projects fail because they're not specific enough and try to do too much at once. When defining the scope of your project, think about:

- > the clinical area are you focusing on a particular physical location, condition or medication?
- > the part of the system you have decided to focus on you've already looked at the whole process, but which part of the process is your problem most likely to be originating from?

Generating ideas

These tools can help you and the team come up with ideas for an area of focus for your project and start identifying potential improvements. Read through all the tools below and use those that you think will be helpful. You may find that you come up with ideas for potential interventions at the same time so make sure you keep a note of these, to come back to later in the guide.

Other ways to generate ideas

- > Use information from other QI tools in this guide eg process map, interviews (if using <u>EBCD</u>).
- > Brainstorm one resource is available from East London NHS Foundation Trust.²³
- > Look at what your measures are telling you (see <u>Section 3</u>).
- > Create a driver diagram (see Exercise 10).



Tip: You may find that you are coming up with improvement ideas as you identify potential issues. This is great: make sure you keep a note of them as a team, to revisit when you're ready to start planning your improvement initiatives.

Cause-and-effect diagram (also known as a fishbone diagram)

When you know which problem you're trying to solve, this tool will help you to investigate the reasons why the problem might be happening in more detail, which can lead to identifying potential solutions. If you have identified multiple problems and aren't yet sure which to focus on, complete a cause-and-effect diagram for each problem and discuss these with your team.

Fig 5: Example cause-and-effect diagram – potential reasons why there may be errors on discharge medication lists in an inpatient medical ward

Start with the problem you're trying to solve and put this in the box on the right. As a team, think about the different factors that could be contributing to this problem (we've already included some headings, based on the Systems Engineering Initiative for Patient Safety (SEIPS) 2.0 framework).



Person(s)

(eg people's experience with a task, wellbeing)

- > Staff inductions
- > Busy staff with lots of competing tasks



(eg local guidelines, organisational culture, workforce issues)

- > Local guidelines need updating
- > Guidelines not viewable on smartphone

Tools and technology

(eg availability, usability)

- > Electronic prescribing newly implemented
- > Admission medications and discharge on separate systems

Tasks

(eg complexity, familiarity)

Prescribers may have to wait for the results of investigations before decisions on prescribing can be made, meaning completing discharge summaries

Internal environment

(eg lighting, workspace, design, noise)

- No defined quiet place to write summaries
- > Lack of computers

External environment

(eg regional/national/international issues, societal expectations)

- Increase in hospital demand leads to greater pressure on flow of discharges
- Increased incidence of multiple health conditions in the population means more polypharmacy

Potential reasons why there may be errors on discharge medication lists in an inpatient medical ward

The headings used in Fig 5 are taken from the Systems Engineering Initiative for Patient Safety (SEIPS) 2.0 framework.²⁴ Fig 5 portrays the problem in a simplified version so that it can be easily visualised, but it's important to remember that all parts of the system (person(s), organisation, tools and technology, task, internal environment and external environment) are interlinked.

Useful resources 6

- > Cause and effect diagram (fishbone) resource from East London NHS Foundation Trust²⁵
- > Cause and effect diagram template

Plan on a page

Now is the time to collate your ideas and all the work you've done so far, and document a plan for your project. First, you should define the aim of your project.



Aim statement

Your aim statement is a specific statement about what you want the project to achieve. It's important that you make it SMART (Specific, Measurable, Attainable, Realistic, Time-framed).²⁶ Think about what you want the outcome of your project to be and the processes involved, ensuring that these are things you're able to measure (see Section 3).

Useful resources 7

- > RCP Quality Improvement hub⁴ > Quality Improvement Tools > Setting a SMART question Royal College of Physicians
- > Aim statements NHS Lothian²⁷

Exercise 8

Define your aim statement

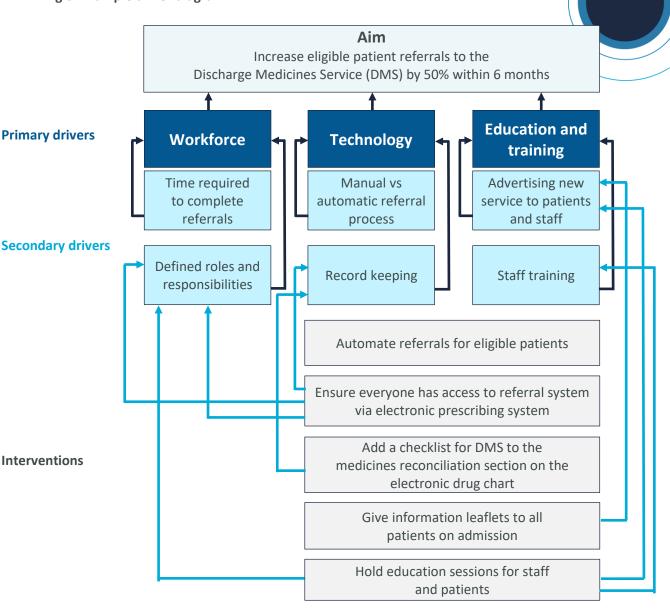
> Define the scope of your project by bringing together your ideas, previous QI tools and all the other information you've gathered so far and creating your aim statement.

Driver diagram

Once you have an aim statement, you can start populating a driver diagram. This diagram will be a useful summary of your whole project ('plan on a page') and will also help when generating ideas for potential interventions.

It is a way of visually describing what the team thinks will 'drive', or contribute to, achieving the project aim by looking at the relationship between the aim, the primary drivers (the things that directly contribute to achieving the aim), the secondary drivers (relevant components of the primary drivers) and the specific improvement ideas for each secondary driver.²⁸

Fig 6: Example driver diagram



Useful resources 8

- > QI toolkit: driver diagrams West of England Academic Health Science Network²⁹
- > Driver diagrams East London NHS Foundation Trust³⁰

Exercise 9

Create your driver diagram

> Create your own driver diagram, using Fig 6 as an example. You can do this on the computer or on a piece of paper but make sure you complete it as a team. You may find you can only fill in some parts at this point but you can add to the driver diagram as your project develops. Revisit your driver diagram at the end of Section 4, to populate your interventions.



By now, you should have:

- > an agreed area of focus within your system
- > defined SMART project aim(s)
- started to populate a driver diagram for your project, with primary and secondary drivers.



Making improvements

Your interventions are the changes you will introduce to try to make improvements. You may already have ideas for interventions but aim to use a few different ones in your project. The number of interventions you have will depend on your project aim and the resources available to you, but make sure you plan a few different interventions, even if they change as your project progresses.

Exercise 10

Gather potential interventions

As a team, discuss all potential interventions and add these to your driver diagram. Use the tools we've covered so far to help you bring together ideas in your discussion.

Impact matrix

This is a tool to help you decide which interventions to focus on, by comparing the effort required to implement the intervention with the predicted impact of the intervention.⁶² Each potential intervention is plotted on a matrix, comparing effort required and predicted impact (see template), helping you and the team to decide which interventions to implement.

Exercise 11

Complete an impact matrix

Plot all your potential interventions on an impact matrix (use our template here). If it gets quite crowded, you may find it easier to assign each intervention a number, which you can plot on the grid instead.

When deciding which interventions to implement first, focus on just two or three to begin with. You can add more later, but having too many at any one time might make the project too complex and make it harder to identify which ones are leading to improvements.

Exercise 12

Decide interventions

As a team, decide which interventions you're going to implement, using the impact matrix and your driver diagram to help.

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Forcefield analysis

Now you know which interventions you're going to implement, you'll want to make them as successful as possible. Using a forcefield analysis can help you to do this by identifying factors that will work for (driving forces) and against (restraining forces) a proposed change.³¹



By identifying these forces, you can look to reinforce driving forces and reduce restraining forces,³¹ which will help you to understand how to make your interventions more successful.

Useful resources 9

> Force field analysis – West of England Academic Health Science Network³¹

Exercise 13

Review the project so far...

Now you know your interventions, you need to decide what you're going to measure to show improvement. Return to your measurement plan from Exercise 8, making sure your measures are continuous, able to be measured and relevant to your aim

This is also a good opportunity to review and adapt your:

- > driver diagram do your interventions address the problem you're trying to solve?
- > stakeholders do you have the right people involved?
- > methods used to engage stakeholders are you sharing the right information in the best way?

End of section checklist

By now you should:

- > know which interventions you are going to implement
- > have reviewed and optimised your driver diagram, project stakeholders and stakeholder engagement plan
- > have completed versions of all QI tools from this guide that are relevant to your project
- > have a completed measurement plan.

Section 5: Implementing your improvements



Testing and adapting

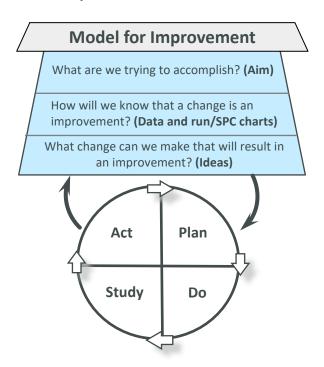
By now, you'll have an idea of what you're trying to improve, how you'll measure improvement and the interventions you'll put in place to do this – so it's time to put your ideas into practice.

PDSA cycles

Plan, do, study, act (PDSA) cycles are a useful method for testing and adapting your interventions. They enable you to start on a small scale, seeing whether the interventions work and whether any changes are needed before implementing on a larger scale. Fig 7 shows how they fit into the Model for Improvement, but PDSA cycles can be used with many other QI approaches.

- > **Plan:** What will happen if you test doing something different? Think about what you predict will happen, how you'll test the intervention and how you'll collect data.³
- > **Do:** Try out the intervention. Document any problems and observations and collect data.³
- > **Study:** Did what happened fit what you expected? Analyse your data and summarise what you've learnt.³
- > Act: Based on what you've learnt, what comes next? Think about the next cycle what needs to be changed? Are you ready to test on a broader scale?³

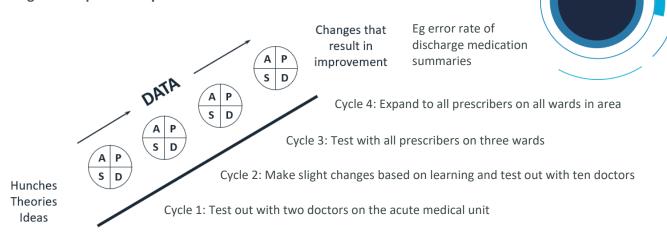
Fig 7: Model for Improvement and PDSA cycles³²



Testing interventions on a larger scale

As you learn more about your interventions, you will develop new PDSA cycles and test your interventions on larger scales (Fig 8). Make sure to keep a record of what happens at each stage of the cycle, including what you learnt and why changes were made.

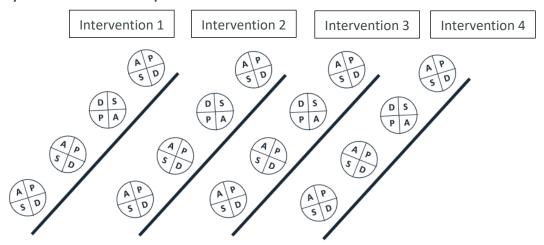
Fig 8: Example PDSA cycle evolution for one intervention³²



eg create a new process for prescribing medications on discharge

Fig 8 shows an example of how PDSA cycles can evolve, but with your multiple interventions you'll eventually end up with something that looks more like <u>Fig 9</u>. Make sure you stagger your interventions, rather than starting them all at once, otherwise it will be hard to identify which ones are responsible for changes in your measurements.

Fig 9: PDSA cycle evolution for multiple interventions³²



Useful resources 10

> Plan, do, study, act (PDSA) cycles and the model for improvement > NHS England and NHS Improvement³³

This may look daunting at first, but remember, you are in control of the timeline of your project, including when to introduce new PDSA cycles. Start with one PDSA cycle and subsequent cycles will naturally follow, depending on what you discover along the way.

Exercise 14

Start PDSA cycles

Draw out a PDSA cycle for your first intervention and populate the Plan section. Fill in the Do, Study and Act sections as your project progresses.

Repeat this for each intervention and remember to keep a note of what you learn from each PDSA cycle and your decisions.

This is also a good opportunity to review and adapt your:

- > driver diagram do your interventions address the problem you're trying to solve?
- > stakeholders do you have the right people involved?
- > methods used to engage stakeholders are you sharing the right information in the best way?

When you're confident that your intervention is effective, it is important to maximise the chance of this being maintained by planning how the intervention will be sustained in the long term.

Sustaining improvement

Sustainability is when a change becomes normal practice.³⁴ Some points to consider when planning your project, to help ensure sustainability:³

- > What is the hook? Consider why this project is important, what it adds and who it helps.
- > Highlight the positives and focus on benefits to patients and staff.
- > Publicise your work, making sure that people know the important points and how they can help.
- > Align the project to organisational (or national) priorities where possible.
- > Automate data collection where possible and share the results.
- > Continually seek feedback from stakeholders and review how you're engaging with them.
- > As your project grows, you may need more or different people. Ensure that you have the right people on board by continually reviewing who is involved in your project.
- > Recruit people to champion the interventions in local areas and at senior management level.
- > Make the interventions as simple as possible for those involved and try to embed them into routine practice.
- > Identify and manage barriers to implementation and sustainability.

You'll also need a long-term plan for when your interventions are ready to become normal practice. Consider the following when discussing this with your team:

- > What will the next phase of the project look like?
- > Will someone else take over the project and develop new interventions?
- > What measures are you going to use for continuous tracking of your interventions?
- > Who will be responsible for collecting and analysing data?
- > Where will the data from these measures be reported?
- > How will any issues be escalated, and to whom, when needed?



Useful resources 11

- > Ensuring success and sustainability of a quality improvement project (journal article)³⁴
- > The spread and sustainability of QI in healthcare East London NHS Foundation Trust³⁵
- > ABC of quality improvement in healthcare³ see chapter on 'Embedding and sustaining a solution'



Continue to have regular project team meetings, reviewing data and adapting your project where needed and enjoy making a difference in your local areas, for your colleagues and for your patients.

Writing up your project

Find out how your organisation prefers to write up QI projects and ensure that the project team are familiar with what's required in the early stages of the project. This will also help you to identify any parts you may have missed. An example of a useful template for QI projects is the Revised Standards for Quality Improvement Reporting Excellence (SQUIRE 2.0).³⁶

End of section checklist

By now you should:

- > know how you are going to implement your interventions
- > know how to use PDSA cycles to test and adapt your interventions
- > have plans in place to ensure sustainability of your improvement project.

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